

Mid point and distance

Mid point. $(x, y) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$

Find the coordinates of Mid-point in each pair of points on the line. Also find the distance of the two points A and B.

			Mid Point	Distance
Q.1	A (1, 2),	B (4, 5)	(<u>2.5</u> , <u>3.5</u>)	<u>4.72</u>
Q.2	A (2, 5),	B (6, - 3)	(<u>4</u> , <u>-1</u>)	<u>8.24</u>
Q.3	A (4, 3),	B (-8, -7)	(<u>-2</u> , <u>-2</u>)	<u>15.29</u>
Q.4	A (-3, 1),	B (6, - 3)	(<u>1.5</u> , <u>-1</u>)	<u>6.71</u>
Q.5	A (1, 3),	B (4, - 1)	(<u>2.5</u> , <u>1</u>)	<u>3</u>
Q.6	A (5, 6),	B (3, - 1)	(<u>4</u> , <u>2.5</u>)	<u>5.29</u>
Q.7	A (-2, 6),	B (-4, - 5)	(<u>-3</u> , <u>0.5</u>)	<u>12.02</u>
Q.8	A (7, - 6),	B (8, - 2)	(<u>7.5</u> , <u>-4</u>)	<u>12.37</u>
Q.9	A (-5, -8),	B (-6, - 1)	(<u>-5.5</u> , <u>-4.5</u>)	<u>7.07</u>
Q.10	A (5, 0),	B (3, - 1)	(<u>4</u> , <u>-0.5</u>)	<u>2.29</u>

Find the co-ordinate of the point when one point the mid point known.

Q.11	A (5, 6),	Mid point (3, - 1)	B(<u> </u> , <u> </u>)
Q.12	A (2, 7),	Mid point (2, 1)	B(<u> </u> , <u> </u>)
Q.13	A (-5, 3),	Mid point (-3, 5)	B(<u> </u> , <u> </u>)
Q.14	A (5, -4),	Mid point (5, 7)	B(<u> </u> , <u> </u>)
Q.15	A (-4, -5),	Mid point (0, - 1)	B(<u> </u> , <u> </u>)

Q16- 20. For the above questions 11 to 15 find the distance of AM and BM and show that AM = BM